# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)
Petition for Rulemaking to Reform the	) RM-11685
Commission's Regulatory Framework for the	)
Terrestrial Use of the Big LEO MSS Band	)
Fixed and Mobile Services in the Mobile Satellite	)
Service Bands at 1525–1559 MHz and 1626.5–	) ET Docket No. 10-142
2660.5 MHz, 1610–1626.5 MHz and 2483.5–	)
2500 MHz, and 2000–2020 and 2180–2200 MHz	)
Amendment of Parts 1, 21, 73, 74 and 101	)
Commission's Rules to Facilitate the Provision of	) WT Docket 03-66
Fixed and Mobile Broadband Access, Educational	)
and Other Advance Services in the 2150–2162	)
and 2500–2690 MHz Bands	)
Amendment of the Commission's Rules with Regard	) GN Docket 12-354
to Commercial Operations in the 3550–3650 MHz Band	)

To: The Commission

#### EIBASS Ex Parte Comments To the Globalstar Petition for Rulemaking

1. Engineers for the Integrity of Broadcast Auxiliary Services Spectrum (EIBASS) hereby respectfully submits its *ex parte* rebuttal comments in response to multiple *ex parte* filings by Globalstar to RM-11685. Although Section 1.405(c) of the Commission's rules regarding rulemaking proceedings states that no additional pleadings to a pending Petition for Rulemaking may be filed after the intial round of comments and reply comments unless specifically requested by the Commission or authorized by it, the electronic comment filing system (ECFS) now shows three *ex parte* filings by Globalstar since the reply comment deadline closed on January 29, 2013.¹ Thus, EIBASS deems this to constitute Commission authorization allowing other interested parties an equal right to file supplemental *ex parte* comments.

<sup>&</sup>lt;sup>1</sup> Specifically, on February 22, 2013; March 21, 2013; and March 28, 2013.

# I. Globalstar Is Mistaken About Grandfathered TV BAS Channel A10 Being a "Settled Issue"

2. In its reply comments, Globalstar once again incorrectly claims that the issue of grandfathered TV BAS Channel A10 at 2,483.5–2,500 MHz is a settled issue. It is not. EIBASS or the Society of Broadcast Engineers, Inc. (SBE) have filed timely Petitions for Reconsideration on each of rulemakings involving S-band Mobile Satellite Service (MSS) Anciliary Terrestrial Component (ATC) operations<sup>2</sup> and the related Broadband Radio Service (BRS) Channel 1.<sup>3</sup> Globalstar continues to overlook paragraph 88 of the March 20, 2008, WT Docket 03-66 *Third Order on Reconsideration and Sixth Memorandum Opinion and Order and Fourth Memorandum Opinion and Order and Second Further Notice of Proposed Rulemaking and Declaratory Ruling*, where the Commission stated, at Paragraph 88:

88. Background. The new BRS Channel 1 band at 2496-2502 MHz, relocated from the 2150-2156 MHz band, partly overlaps a number of services in the 2483.5-2500 MHz band, including Broadcast Auxiliary Service (BAS) Channel A10 operations at 2483.5-2500 MHz. As an initial matter, we note that a pending petition for reconsideration filed by the Society of Broadcast Engineers asks us to adopt a revised band plan for BAS Channels A8-A10 that would remove BAS operations from the 2496-2502 MHz band. We defer consideration of this matter to a separate decision.

- 3. Thus, the A10 issue is still in play. This unresolved issue has been pointed out to Globalstar more than once, and most recently in the January 14, 2013, comments to RM-11685, which the Globalstar reply comments so disparaged. But nowhere in its reply comments did Globalstar address, let alone rebut, the above FCC statement that grandfathered TV Broadcast Auxiliary Services (BAS) Channel A10 (2,483.5–2,500 MHz) remains an open issue.<sup>4</sup>
- 4. The Wireless Telecommunications Bureau (WTB) and the Office of Engineering and Technology (OET) have each found that frequency coordination is not practical between a system of terrestrial base stations providing a Commercial Mobile Radio Service (CMRS) and mobile electronic news gathering (ENG), since both services are not subject to prior scheduling. CMRS use of frequencies is triggered by customers making (or at least attempting) to use their mobile/portable devices, and ENG must go where breaking news events demand. For this reason the Commission found that the bottom of the 2 GHz TV BAS band would have to be re-

<sup>&</sup>lt;sup>2</sup> IB Dockets 01-185 and 02-364, and ET Docket 10-142.

<sup>&</sup>lt;sup>3</sup> WT Docket 03-66.

This grandfathered use is co-primary, not secondary, and has no end date. See Section 74.602(a)(2) of the FCC rules.

allocated. That is, TV BAS would have to be cleared from 1,990–2,025 MHz in order to permit MSS and Advanced Wireless Services (AWS) use.<sup>5</sup> The result was a re-farming of 2 GHz TV BAS from 1,990–2,110 MHz to 2,025–2,110 MHz.

- 5. The International Bureau (IB) has found to the contrary: Namely, that for grandfathered ENG operations on TV BAS Channel A10 that frequency coordination can somehow allow sharing in the same area at the same time. That premise appears to based on the mistaken belief that grandfathered A10 operations are so few as to just be ignored.<sup>6</sup> This has been the basis for both the SBE and EIBASS still unresolved petitions for reconsideration.
- 6. Even if real-time frequency coordination between co-channel ENG operations and MSS ATC could magically allow frequency re-use in the same area at the same time, in the related ET Docket 10-142 (MSS Flexibility) rulemaking EIBASS has documented that Globalstar has failed to contact any of the TV BAS frequency coordinators in the ten major markets where it has proposed to initally build MSS ATC, now re-branded as AWS-5 and TLPS.<sup>7</sup>
- 7. In its August 25, 2011, filing to ET Docket 10-142, Globalstar made a counter proposal to how the 2.5 GHz TV BAS band might be refarmed shown in the attached Figure 1.8 What is important is that this Globalstar filing constituted an acknowledgement, at long last, of the fundamental incompatibility between grandfathered TV BAS Channel A10 operations and MSS ATC operations. Adding AWS-5/TLPS only aggravates the problem.
- 8. In its comments<sup>9</sup> to the WT Docket 03-66 Fourth FNRPM, Globalstar argued against relaxed out-of-band emissions (OOBE) for BRS stations, because of the interference threat to its S-band MSS ATC operations. Globalstar did not entertain the notion of frequency coordination being able to avoid interference between BRS1 base stations and MSS ATC base stations, even though both would be fixed-site stations. Why? Because the MSS handsets that would communicate with MSS ATC base stations are mobile devices, triggered by subscribers making telephone calls, web surfing, or other data requests, whose time-of-use and location is never

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<sup>&</sup>lt;sup>5</sup> ET Dockets 95-18 and 00-258, and WT Docket 02-55.

Indeed, in the July 15, 2010, ET Docket 10-142 NPRM/NOI, the existance of grandfathered TV BAS Channel A10 was not even acknowledged. See the September 15, 2010, EIBASS comments, at paragraph 3.

See the September 6, 2011, EIBASS Reply To Globalstar Opposition to the EIBASS Petition for Reconsideration of the ET Docket 10-142 Report & Order, at paragraph 25–26.

See the August 25, 2011, Globalstar *Opposition* to the May 27, 2011, EIBASS Petition for Reconsideration of the ET Docket 10-142 R&O, at page 5, footnote 10.

<sup>&</sup>lt;sup>9</sup> July 7, 2011, Globalstar comments, at page 3; July 22, 2011, Globalstar reply comments, at page 3.

known in advance. It is the identical conflict for co-channel grandfathered TV BAS Channel A10 ENG operations and MSS ATC/AWS-5/TLPS.

#### **II. Grant of Experimental Licenses**

- 9. EIBASS notes that experimental licenses for AWS-5/TLPS testing on 2,473–2,495 MHz have been granted to Jarvinian Wireless Innovation Fund (Jarvinian); that is, spanning TV BAS Channels A9 (2,467–2,483.5 MHz) and A10 (2,483.5–2,500 MHz). Of course, at S Band the lower MSS limit is 2,483.5 MHz, not 2,473 MHz, which extends 10.5 MHz into TV BAS Channel A9.<sup>10</sup> The authorized power is 4 watts ERP (6.6 watts EIRP). The authorized emission is 22M0F9W; that is, a 22 MHz wide signal. WG2XNK, granted on March 25, 2013, authorizes testing at Cambridge, MA. WG2XNS, granted on April 1, 2013, authorizes testing at two sites in Sunnyvale and one site in Cupertino, both in the San Francisco Bay Area. Neither application contained any frequency coordination exhibit, or acknowledgement that the requested frequencies are currently used by TV BAS stations. Fortunately, both applications were issued with the "SBE Clause." <sup>111</sup>
- 10. Cambridge is a suburb of Boston. Station WCVB-TV, the ABC affiliate serving Boston, holds a TV Pickup license, KR9882, for TV BAS Channels A8, A9 and A10; that is, WCVB-TV has grandfather rights for TV BAS Channel A10. In the San Francisco Bay Area all three of the 2.5 GHz TV BAS channels, A8, A9 and A10, are actively used for ENG operations. Station KPIX-TV, the CBS affiliate serving San Francisco, holds a TV Pickup license, KA35181, again having grandfather rights on A10. The attached Figure 2 shows the KR9882 operational area and the WG2XNK test area. The attached Figure 3 shows the KA35181 operational area and the WG2XNS test areas.
- 11. EIBASS has contacted WCVB-TV and learned that no one from Jarvinian, nor Jarvinian's partner, Globalstar, has contacted them regarding testing on TV BAS Channels A9 or A10.

WiFi IEEE 802.11b direct-sequence spread spectrum (DSSS) Channel 14 is at 2,473-2,495. Its use is not currently permitted in the United States, or most of the world, but is permitted in Japan. Under Globalstar's proposal for use of the 22 MHz wide WiFi channel 14, 10.5 MHz, 2,473.0-2,483.5 MHz, would be Part 15, and 11.5 MHz, 2,483.5-2,495.0 MHz, would be terrestrial MSS, or what Globalstar is now calling AWS-5.

The SBE clause states:
Operation is subject to prior coordination with the Society of Broadcast Engineers, Inc. (SBE); ATTN: Executive Director; 9247 North Meridian Street, Suite 305; Indianapolis, IN 46260; telephone, (866) 632-4222; FAX, (317) 846-9120; e-mail, executivedir @ sbe.org; information, www.sbe.org.

EIBASS has similarly contacted KPIX-TV, which reports that it regularly uses grandfathered A10 from its news helicopter in the South Bay (*i.e.*, the WG2XNS venues of Cupertino and Sunnyvale). KPIX-TV has now proactively contacted Jarvinian, and received assurances that no testing will commence without prior coordination.

12. The basis for Jarvinian requesting not just 2,483.5-2,495 MHz, but rather 2,473-2,495 MHz, is that it expects to routinely use portions of the Part 15 WiFi band falling in TV BAS Channel 9 for the TLPS portion of AWS-5/TLPS.<sup>12</sup> Of course, Part 15 WiFi operations are not allowed to cause interference to licensed stations (*i.e.*, TV BAS operations on A8 and A9) and must accept interference from licensed stations.<sup>13</sup> And contrary to Globalstar's claims, Globarstar does not hold "exclusive" rights to 2,483.5–2,495 MHz.<sup>14</sup> Those rights are subject to an encumbrance, namely grandfathered TV BAS Channel A10 stations, which are co-primary and have no sunset date on their grandfather rights. Between co-primary users, the newcomer user must protect the incumbant user. EIBASS will keep reminding Globalstar of this obligation.

#### III. Summary

13. The January 29, 2013, Globalstar RM-11685 reply comments made several inaccurate statements about grandfathered TV BAS Channel A10. EIBASS is pleased to now have the opportunity to file these *ex parte* comments so that the RM-11685 record reflects this rebuttal information. EIBASS will also be following the WG2XNK and WG2XNS experimental testing with great interest.

The bolding in the above quotation is EIBASS'.

WiFi IEEE 802.11b direct-sequence spread spectrum (DSSS) Channel 14 is at 2,473-2,495 MHz. Its use is not currently permitted in the United States, or most of the world, but is permitted in Japan. Under Globalstar's proposal for use of the 22 MHz wide WiFi channel 14, 10.5 MHz, 2,473.0-2,483.5 MHz, would be Part 15, and 11.5 MHz, 2,483.5-2,495.0 MHz, would be terrestrial MSS, or what Globalstar is now calling AWS-5.

Section 15.5(b) of the FCC rules.

At 38 minutes into the January 22, 2013, Jarvinian/Globalstar webinar, Mr. L. Barbee Ponder, the Globalstar General Counsel and Vice President of Regulatory Affairs, states:

<sup>&</sup>quot;We are currently **exclusively** licensed to operate between 2,483.5 and 2,495 for our MSS service. What we are proposing is an AWS-5 band that only covers what we are currently **exclusively** licensed to operate between 2,483.5 to 2,495, and then we would be permitted to utilize the additional 10.5 MHz that make up channel 14 on an unlicensed, non-exclusive basis and it would not impact any current or future unlicensed use in that band."

#### IV. List of Figures

- 14. The following figure has been prepared as a part of these RM-11685 ex parte comments:
- Existing 2.5 GHz TV BAS band vs. Globalstar proposal for re-farming the 2.5 GHz TV BAS band
- 2. Map showing KR9882 operational area vs WG2XNK
- 3. Map showing KA35181 operational area vs WG2XNS.

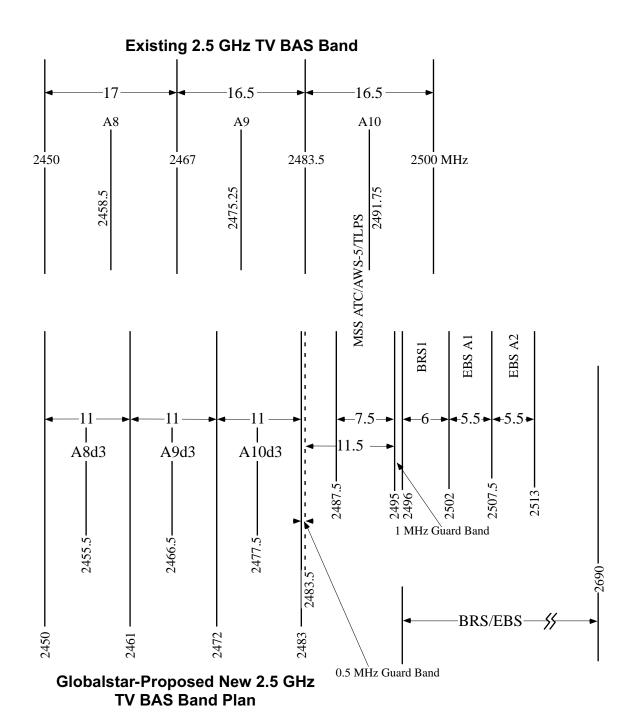
#### Respectfully submitted,

- /s/ Dane E. Ericksen, P.E., CSRTE, 8-VSB, CBNT EIBASS Co-Chair Hammett & Edison, Inc., Consulting Engineers San Francisco, CA
- /s/ Richard A. Rudman, CPBE EIBASS Co-Chair Remote Possibilities Santa Paula, CA

April 16, 2013

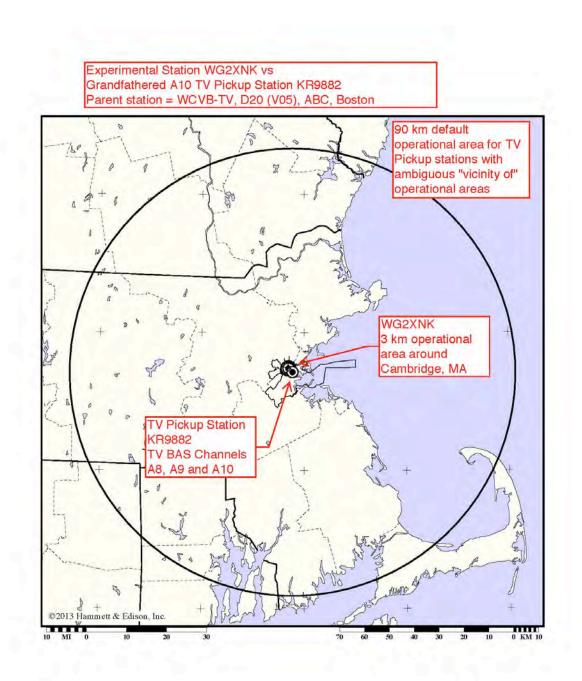
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#### Existing vs Globalstar-Proposed New 2.5 GHz TV BAS Band Plan



All frequencies and bandwidths are in MHz.

#### **Experimental Station WG2XNK vs. TV Pickup Station KR9882**



#### Experimental Station WG2XNS vs. TV Pickup Station KA35181

